

ABSTRACT

An infrared (IR) sensitive pixel and an IR imager including the same. According to one embodiment, the pixel includes a substrate assembly having a cavity defined by at least one sidewall and a cantilevered beam connected to the substrate assembly and disposed in the cavity. The cantilevered beam includes a first spring portion and a first capacitor plate portion, wherein the first spring portion includes at least two materials having different coefficients of thermal expansion. The pixel further includes a second capacitor plate portion, such that incident IR radiation causes the first spring portion of the cantilevered beam to move laterally relative to the sidewall, thereby creating a variable capacitance between the first capacitor plate portion of the cantilevered beam and the second capacitor plate portion.